

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A hybrid-electric wheeled vehicle powertrain comprising an internal combustion engine, an electric motor, an electric generator and a battery; the electric motor, the electric generator and the battery being electrically connected to form an electrical power source; a geared transmission defining power flow paths to vehicle traction wheels, the geared transmission having a first element connected drivably to the engine and a second element connected drivably to the motor; a rotor for the generator being connected to a third element of the geared transmission; and a reaction brake for anchoring the second element of the geared transmission as the engine drives the electric generator during operation of the powertrain in a reverse driving power delivery mode, the electric motor being drivably connected through the geared transmission to the vehicle wheels; the driving connection of the second element of the geared transmission to the motor comprising a clutch between the second element of the geared transmission and a torque output element of the powertrain whereby the motor, with the clutch disengaged, is isolated from the second element during reverse drive; the reaction brake for anchoring the second element of the geared transmission being released and the clutch being engaged during operation of the powertrain in a split-power delivery mode in a forward vehicle driving direction.

2. (currently amended) A hybrid-electric wheeled vehicle powertrain comprising an internal combustion engine, an electric motor, an electric generator and a battery;

the electric motor, the electric generator and the battery being electrically connected to form an electrical power source;

a geared transmission defining power flow paths to vehicle traction wheels, the geared transmission having a first element connected drivably to the engine and a second element connected drivably to the vehicle traction wheels;

a rotor for the generator being connected to a third element of the geared transmission; and

a first clutch selectively connecting two elements of the geared transmission thereby establishing a direct drive between the engine and the electric generator as the engine drives the electric generator during operation of the powertrain in a reverse vehicle driving direction, the electric motor being drivably coupled through the geared transmission to the vehicle wheels;

the driving connection of the second element of the geared transmission to the vehicle traction wheels comprising a second clutch between the electric motor and the gear elements of the geared transmission, the second clutch being disengaged and the first clutch being engaged during reverse drive operation whereby the engine drives the generator to charge the battery through a torque flow path that is isolated from a reverse drive motor torque flow path.

3. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 2 wherein the first clutch connects the first and second gear elements of the geared transmission to achieve a direct drive in a torque delivery path between the engine and the generator as the engine drives the generator to charge the battery.

4. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 1 wherein the geared transmission has a planetary gear set including a sun gear connected to the generator, a ring gear, and a carrier connected to the engine;

the clutch, when engaged, completing a geared torque flow path between the engine and the vehicle traction wheels during forward drive operation,

the reaction brake anchoring the ring gear when the generator is driven by the engine.

5. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 2 wherein the geared transmission has a planetary gear set including a ring gear, a sun gear connected to the generator and a carrier connected to the engine;

the second clutch completing a torque flow path between the ring gear and the vehicle traction wheels during forward drive operation.

6. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 1 wherein the reaction brake acts on the second element of the geared transmission to effect engine starting torque delivery from the generator to the engine as the generator functions as an engine starter torque source.

7. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 4 wherein the reaction brake anchors the ring gear of the geared transmission to effect engine starter torque delivery from the generator to the engine as the generator functions as an engine starter torque source.

8. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 5 wherein the first clutch connects the carrier and the ring gear of the geared transmission to achieve a direct drive in a torque delivery path between the engine and the generator as the engine drives the generator to charge the battery.

9. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 1 wherein the geared transmission includes countershaft gears in a power flow path between the motor and the torque output element of the powertrain and between the second element of the geared transmission and the motor.

10. (previously presented) The hybrid-electric wheeled vehicle powertrain set forth in claim 2 wherein the geared transmission includes countershaft gears in a power flow path between the motor and the traction wheels and between the second element of the geared transmission and the motor.

11. (previously presented) A hybrid-electric wheeled vehicle powertrain comprising an internal combustion engine, an electric motor, an electric generator and a battery;

the electric motor, the electric generator and the battery being electrically connected to form an electrical power source;

a geared transmission defining power flow paths to vehicle traction wheels, the geared transmission having a first gear element connected to the engine and a second gear element connected drivably to the motor;

a rotor for the generator being connected to a third element of the geared transmission;

means for establishing a driving connection between the engine and the generator through the gear elements during operation of the powertrain in a reverse driving power delivery mode, the electric motor being drivably connected to the vehicle traction wheels; and

means for isolating a torque flow path between the motor and the vehicle traction wheels from a torque flow path between the engine and the generator.